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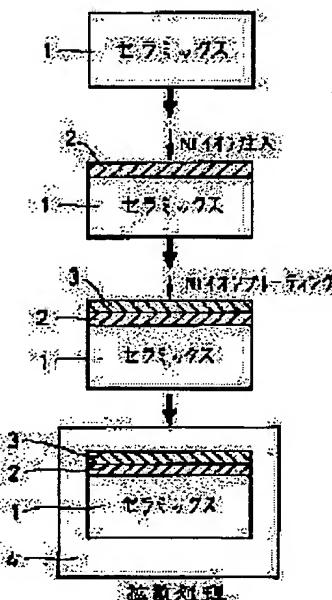
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 MUROO YOUJI**(54) JOINING METHOD FOR CERAMIC****(57) Abstract:**

PURPOSE: To join between ceramics or a ceramic and a metal with high strength and high airtightness by thermally diffusing an Ni ion plating layer formed on the surface of a ceramic to modifying the leaking property of the surface.

CONSTITUTION: Ni ion is implanted in the surface of a ceramic 1 to form an ion-implanted layer 2. Ni ion plating is applied to the layer 2 to form an Ni ion plating layer 3. The layers are then heated in a vacuum furnace 4 and thermally diffused to form an Ni surface-treated layer. Consequently, the Ni concn. is increased on the surface, an interface between the ion-implanted layer and the ion plating layer 3 is eliminated, and the treated ceramics are joined or the treated ceramic is joined to a metal by grazing with high strength and high airtightness.

**LEGAL STATUS**

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